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AUTHOR Donahue, Mavis L.
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ABSTRACT

The pragmatic competence of 33 learning disabled (LD) children (grades 2, 4 and 6) was examined on a task that allowed for the separate assessment of linguistic and social knowledge, i.e., the ability to appropriately vary politeness and persuasive strategies as a function of listener status. LD and non LD Ss made requests of four imaginary listeners varying on dimensions of intimacy and power. LD girls produced more polite requests than non LD girls to all listeners. LD boys' politeness and the elaboration of their persuasive appeals exhibited variations as a function of listener features, but attended to different dimensions than those reflected in non LD boys' requests. It appeared that LD Ss produced less appropriate requesting strategies than non LD Ss, even though their repertoire of linguistic forms for conveying politeness was not deficient. (Author)

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REQUESTING STRATEGIES OF LEARNING DISABLED CHILDREN

Mavis L. Donahue

University of Illinois at Chicago Circle

ADDRESS FOR CORRESPONDENCE:

Mavis L. Donahue
College of Education
University of Illinois
at Chicago Circle
Box 4348
Chicago, IL. 60680

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Mavis Donahue

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Abstract

Learning disabled children's pragmatic competence was examined on a task which allowed for the separate assessment of linguistic and social knowledge, i.e., the ability to appropriately vary politeness and persuasive strategies as a function of listener status. Learning disabled and non-disabled children made requests of 4 imaginary listeners varying on the dimensions of intimacy and power. Learning disabled girls produced more polite requests than nondisabled girls to all listeners. Learning disabled boys' politeness and the elaboration of their persuasive appeals exhibited variations as a function of listener features, but attended to different dimensions than those reflected in nondisabled boys' requests. It appears that these children produced less appropriate requesting strategies than nondisabled children, even though their repertoire of linguistic forms for conveying politeness was not deficient. These results are discussed in terms of the interdependence of the social and linguistic knowledge underlying pragmatic development.

Requesting Strategies of Learning Disabled Children

The ability to appropriately vary requesting strategies as a function of listener characteristics has been examined by researchers from various theoretical orientations and for various purposes. Early studies perceived this skill as primarily a measure of social knowledge, particularly listener perspective-taking (Wood, Weinstein and Parker, 1967). For example, children's production of listener-adapted strategies for enlisting the cooperation of another has been shown to be related to age (Clark and Delia, 1976; Finley and Humphreys, 1974; Piche, Rubin and Michlin, 1978; Wood, Weinstein and Parker, 1967), social adjustment (Spivack and Shure, 1974), and socioeconomic status (Alvy, 1973). More recently, psycholinguists have begun to investigate the development of requesting strategies as an aspect of pragmatic competence (Bates, 1976; Ervin-Tripp, 1977; Garvey, 1975; James, 1978; Mitchell-Kernan and Kernan, 1977). This trend reflects the increasingly accepted notion among linguists and psycholinguists that a description of a child's emerging linguistic system is incomplete without information about the child's ability to convey and interpret intentions which are contextually appropriate (Dore, 1977; Dore, Gearhart and Newman, 1978; Hymes, 1971; Ochs and Schieffelin, 1979). Thus, these researchers would agree that the contributions of social knowledge and linguistic development to pragmatic competence are intricately inter-related.

The accommodation of communicative strategies to listener characteristics is a clear example of a pragmatic skill which depends on the intersection of social knowledge and linguistic ability. For example, a child's ability to produce polite requests to adults and less polite requests to peers (Bates, 1976; Ervin-Tripp, 1977) depends on (1) the child's ability to perceive critical listener differences; (2) the understanding of the implications of these differences for

appropriate speech; and (3) a repertoire of semantic-syntactic forms which convey the same intention, but which reflect differing degrees of politeness. Thus, deficits in either social or linguistic knowledge may disrupt the ability to produce situationally appropriate speech.

Although children with primary language deficits have been found to be also limited in their communicative repertoire (Fey, Leonard, Fey and O'Connor, 1978; Prinz, in press; Snyder, 1978), other studies of pragmatic competence in exceptional populations suggest that syntactic-semantic ability may develop independently of the acquisition of the rules governing socially appropriate speech (Bloom and Lahey, 1978; Rees, 1978). For example, mentally retarded adults with very limited linguistic skills have been found to appropriately vary their conversational strategies as a function of the listener (Bedrosian and Prutting, 1978). Similarly, Fey, Leonard and Wilcox (in press) demonstrated that young language impaired children modified both syntactic and communicative aspects of their speech when addressing a younger child as compared to a same-aged listener. Conversely, Blank, Gessner and Esposito (1979) have recently reported a case study of a child with a normally developing linguistic system who exhibited virtually no conversational skills or sensitivity to listener variables. In addition, referential communication studies have found normal children's social adjustment to be related to their ability to produce messages adapted to a listener's perspective (Gottman, Gonso and Rasmussen, 1975; Rubin, 1972; Shantz, 1975).

The purpose of this study, then, was to examine the ability to adjust requesting strategies to listener characteristics in a group of children who have been found to experience difficulty in both language and social development, i.e., learning disabled children. Thus, these children appear to be

especially vulnerable to pragmatic deficits. In addition, their performance on a task which allows for the separate assessment of linguistic and social components allowed an examination of the interdependence of the social and linguistic knowledge underlying their pragmatic development.

Children with learning disabilities are defined as those with normal intelligence and intact sensory and emotional functioning, but who exhibit "a disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written ..." (USOE, 1977, p. 65083). Although learning disabled children's difficulties with written language are more widely documented and sometimes more obvious (Torgesen, 1975), there is increasing evidence that these reading disorders are linked to underlying deficits in oral language (Vellutino, 1978; Wolf, in press). That learning disabled children can be characterized as "subtly dysphasic" (Denckla and Rudel, 1976, p. 12) is demonstrated by the findings that they are impaired in most aspects of syntactic-semantic processing, e.g., vocabulary development (Fry, Johnson and Muehl, 1970; Wiig and Semel, 1976), lexical retrieval (Denckla and Rudel, 1976; Wolf, in press), and the comprehension and production of syntactic and morphological structures (Fry, Johnson and Muehl, 1970; Moran and Byrne, 1977; Vogel, 1975; Wiig and Semel, 1976).

Learning disabled children have also been found to experience considerable difficulty in social adjustment. Compared to siblings, learning disabled children were perceived by their parents as more difficult to talk to, more impulsive, and more anxious (Owen, Adams, Forrest, Stolz and Fisher, 1971). These children appear to be less able than nondisabled classmates to achieve social acceptance from teachers (Keogh, Tchir and Windeguth-Behn, 1974) and peers (Bruininks, 1978; Bryan, 1974, 1976; Scranton and Ryckman, 1979; Siperstein, Bopp and Bak,

1978). In addition, studies of children's ability to perceive attitudes and feelings of others have shown learning disabled children to be less empathetic (Bachara, 1976) and less skilled at understanding nonverbal behavior (Bryan, 1977; Wiig and Harris, 1974).

The few studies of learning disabled children's use of language in social contexts suggest that their conversational interactions with others reflect their social adjustment more clearly than their deficits in linguistic structure. Two classroom observational studies found that learning disabled children's conversations with peers were more hostile and less cooperative than those of normal children (Bryan, Wheeler, Felcan and Henek, 1976; Bryan and Bryan, 1978). Other studies characterize learning disabled children as less assertive conversational partners, a posture which may reflect their low social position. In a referential communication task where the child played the role of listener, learning disabled children who were found to be as skilled as normal children at recognizing ambiguous messages provided by an adult were less likely to request clarification of these messages (Donahue, Pearl and Bryan, in press). In a peer interaction study of group decision-making (Bryan, Donahue and Pearl, in press), learning disabled children's conversational strategies were found to be less persuasive and more deferential than those of nondisabled children. Although learning disabled children did not produce fewer conversational turns, they were more likely to agree and less likely to disagree with the other children's opinions, and less likely to argue for their own positions or to attempt to hold the conversational floor. These results suggest that these children were trying to participate in the conversation, but without offending their partners or assuming the group leader's role.

However, none of these studies examined pragmatic skills which required

a wide repertoire of syntactic-semantic strategies for varying the surface form of particular speech acts. The only study to date which has investigated learning disabled children's ability to accommodate communicative strategies to listener characteristics provides more direct evidence of the impact of linguistic deficits on their conversational skills (Bryan and Pflaum, 1978). Fourth and fifth grade children were asked to teach a game to a same-aged classmate and to a kindergarten-aged child. Learning disabled males were found to produce less complex speech than the other children and the syntactic complexity of their speech did not vary across the two listener conditions. Learning disabled females and the nondisabled children were able to vary the syntactic complexity of their utterances as a function of listener age. Learning disabled females and nondisabled males used less complex speech when interacting with the younger child; surprisingly, nondisabled females used more complex speech in this condition.

In summary, these findings support the hypothesis that learning disabled children are less skilled than normally achieving peers at appropriately varying request strategies as function of listener status. In addition, these data also suggest that learning disabled children's performance on this task may be related to deficits in (1) the social knowledge necessary to perceive social distinctions among listeners and to understand their implications; and/or (2) the linguistic repertoire of request forms available.

To examine these issues, learning disabled and normal children in grades 2, 4, and 6 were each instructed to pretend that they needed 4 newspapers for a school project and to convince each of 4 imaginary listeners to give up their newspapers. The listeners varied on the dimensions of power and intimacy relative to the children, i.e., the child's father (+ power, + intimacy),

the parish priest (+ power, - intimacy), a same-sex best friend (- power, + intimacy), and a same-sex "new kid" (- power, - intimacy). Listeners varying on these dimensions were selected because requesting strategies of both adults and children have been shown to be particularly sensitive to these social features (Ervin-Tripp, 1976, 1977; James, 1978; Mitchell-Kernan and Kernan, 1977; Piche et al., 1978).

The request episodes were coded in two ways: (1) by examining the politeness of the actual request form, a variable related to linguistic repertoire; and (2) by ranking the persuasive characteristics of the remarks offering support for the request along a dimension of listener perspective-taking, a measure of social knowledge. The following predictions were made: (1) learning disabled children would produce a smaller range of request forms; (2) learning disabled children would produce fewer and a smaller range of persuasive appeals and their persuasive appeals would reflect a lower level of listener perspective-taking than nondisabled children; and (3) compared to same-sex nondisabled children, learning disabled children's politeness and persuasive appeals would exhibit less variation as a function of listener power and intimacy.

To examine the effect of listener variables on children's politeness and persuasive appeals, only within-sex comparisons were planned. Differences between sexes are uninterpretable because although boys addressed only same-sex listeners, girls' high-power listeners were also male. This confound of sex and power was unavoidable, in that it was very difficult to devise listeners who systematically differed in terms of relative intimacy and power, but who could also plausibly be either male or female. For example, the high-power targets used by Piche et al. (1978) were same-sex parent (+ intimate) and same-sex teacher

(- intimate). However, since there were no male teachers in the schools our subjects attended, that condition would have been markedly more difficult for the children to imagine. The relationship between sex and power in the listeners addressed by female subjects, unfortunately, reflects typical real-life constraints.

Method

Subjects

Subjects were students in 3 Chicago parochial schools which did not identify children experiencing learning problems because no special education services were available. By selecting this sample from schools with no labelled learning disabled children, the possible effect of the learning disabilities label on the development of pragmatic skills was eliminated. Subjects defined as learning disabled were selected by uniform criteria whose characteristics conformed to the federal guidelines for identifying a learning disabled child, i.e., a student with at least average intelligence and intact sensory and emotional functioning who "does not achieve commensurate with his or her age and ability levels in one or more of (8 academic areas) ..." (USOE, 1977, p. 65083). Thus, subjects in 2nd, 4th and 6th grades were selected for participation in the study on the bases of intelligence test scores, teacher ratings, and reading achievement scores. Using the Peabody Picture Vocabulary Test (PPVT) (Dunn, 1965) as a measure of intelligence, children with PPVT scores below 90 were excluded from the study.

Subjects defined as learning disabled were 33 children who were rated by teachers as having difficulty in reading, attention, verbal skills, or in following directions, and whose reading level on achievement tests fell below the 40th percentile for their grade. Of the learning disabled sample, there were

4 boys and 4 girls in the second grade, 6 boys and 6 girls in the fourth grade, and 8 boys and 5 girls in the sixth grade. Nondisabled subjects were 30 children who received average or above teacher ratings and reading achievement scores above the 40th percentile. This control sample included 3 boys and 3 girls in the second grade, 5 boys and 6 girls in the fourth grade, and 9 boys and 4 girls in the sixth grade. The SRA Achievement Series Test (Naslund, Thorpe and Lefever, 1978), was used to classify most of the children; however, scores on the reading subtest of the Woodcock-Johnson Psychoeducational Battery (Woodcock and Johnson, 1977), which was individually administered to all children, were used for children for whom SRA scores were unavailable. The mean PPVT score of the learning disabled children was 110.03 (S.D. = 10.55); their mean Woodcock-Johnson reading test grade percentile was 22.06 (S.D.= 12.09). The mean PPVT score of the nondisabled children was 112.73 (S.D. = 13.34); their mean reading test grade percentile was 66.77 (S.D. = 19.10). All children were Caucasian, native speakers of English, and from middle-class backgrounds.

Procedure

Each subject was brought to a laboratory trailer parked on school grounds and was seated at a small table holding an audiotape recorder and a microphone. The experimenter, an adult female, remarked that sometimes people need help from others and asked the child to describe an occasion when she/he had needed another person to help. (If the child could not think of an example, the experimenter suggested the situation of needing someone to help carry a heavy object.) The experimenter then explained that she would describe such a situation and some people who might be there, and that she wanted to know what the child might say to get these people to agree to help. The child was told to imagine that

she/he was speaking directly to whomever was available to help. The following vignette was then presented to each child:

> Suppose that you have to give a big report to your class and you need 4 of this week's newspapers to do it. But you have forgotten all about it. You run to get the newspapers, but you can't find any.
>
> Suppose you see the new boy (or girl) in your class (your best friend, your father, your priest) reading Monday's (Tuesday's ...) newspaper. Say everything you can think of to get him (her) to give you the newspaper.

After the child finished his/her request, the experimenter probed by saying:

> But suppose the new boy (girl) (your best friend, your father, your priest) looks as if he/she is about to say no. Say everything you can think of to keep him/her from saying no.

Children who used indirect discourse, e.g., "I'd ask him to give it to me," were reminded to "say it just as you would say it if he/she were standing right here." Each child was randomly assigned to one of four random orders of listener presentation.

Coding

The tape recordings were transcribed by a research assistant unaware of the age or group status of the children. Since both the politeness of the actual request and the nature of the persuasive appeals which were offered to support the request were of interest, each request episode, i.e., all the remarks addressed to a particular listener, was coded in two ways.

Politeness of the request. The first request produced by the child was

isolated and its semantic/syntactic form was assigned a scale value representing degree of politeness. This scale was derived by having adults perform paired-comparison judgments of the 18 most frequently occurring request forms. Each request form was paired with every other request form, generating 153 pairs $\frac{(18 \times 17)}{2}$. These were randomly sorted into 5 sets of 30 or 31 pairs and each of 100 college students judged one set, providing a total of 20 judgments of each pair of requests. A rank order of the 18 request forms and their scale values was determined using a method of paired comparisons (Edwards, 1957). Table 1 presents the 18 requests, their semantic/syntactic forms and

Insert Table 1 About Here

their scale values. The infrequently occurring requests which did not conform to these 18 forms were assigned the scale value of the most similar semantic/syntactic form. For example, the least polite level (0.00) included other imperatives, e.g., "Lemme have your newspaper" and "You have to give me your newspaper." Extremely polite requests (e.g., "Would you mind if I borrow your newspaper?") and indirect requests or hints (e.g., "Are you using your newspaper?") were assigned the highest scale value.

Persuasive appeals. After the request in each episode was isolated, any remarks which suggested why the listener should comply with the request were identified. These attempts to persuade the listener were coded as one of 5 appeal types, using a modification of Clark and Delia's (1976) system for ranking types of persuasive appeals along a dimension of listener perspective-taking. Appeals could occur both within the actual request, or as separate utterances; however, repetitions of appeals were not coded. Definitions and examples are provided below.

Level of Perspective-Taking

0 No persuasive appeals.

0 Coercive appeals included threatening, pleading and cajoling. e.g., "oh come on," "pleeaase!", "I'll punch you if you don't give it to me," and "if you won't give it to me, I won't be your best friend anymore" (specific, addressed to best friend).

1 Appeals emphasizing the speaker's need provided a justification for asking the request, e.g., "I need it for a school project," and "I'll really get in trouble if I don't find one."

2 Appeals invoking social norms or the relationship between speaker and listener included preaching, e.g., "It would be nice if you would give it to me," "Everybody else is helping me," "Priests are supposed to help people" (specific, addressed to priest) and calling in debts, e.g., "Remember when I helped you last week?"

2 Appeals dealing with counterarguments mitigated the cost of compliance with the request, e.g., "Could I borrow your paper when you're finished with it?", "I only need it for a minute," and "You can keep the sports section and I'll take the rest," (specific, addressed to father).

3 Appeals to the listener's self-interest suggested the advantages of compliance with the request, e.g., "I'll give you a quarter," "Tomorrow I'll go and get you a newspaper," and "I'll invite you over to my house so that you can get to know some of the kids here," (specific, addressed to the new kid).

Clark and Delia's (1976) hierarchy proposes that the lowest level of perspective-taking is demonstrated by the failure to make any attempt to persuade a listener (Level 0). However, appeals which emphasize the speaker's need (Level 1) reflect less awareness of the listener's viewpoint than those which foresee and deal with counterarguments (Level 2), which in turn are less sophisticated than appeals which point out any advantages which the listener's compliance with the request may bring (Level 3). Two categories which were not captured by this system, coercive appeals and appeals to social norms or relationships, were integrated into the perspective-taking hierarchy in the following way. It was reasoned that, compared to the failure to provide any appeals, the use of coercive appeals did not represent a significant increment in role-taking ability, so they were assigned to the lowest level (0). Appeals which invoked social norms or relationships were included in the intermediate level of perspective-taking (2) in that their appeal to the listener's altruism and social desirability appears more sophisticated than simply indicating the speaker's need, but does not demonstrate the ability to adopt another's vantage point required by appeals focusing on advantages to the listener.

In addition, each appeal was coded as specific, i.e., obviously tailored to the characteristics of just one of the four listeners, or general, i.e., containing no personalized remarks. Specific appeals, then, were operationally defined as those which allowed a coder to identify the child's listener, even though this information was not included on the transcripts. The use of specific appeals was intended as an additional measure of the ability to take a listener's characteristics into account when formulating persuasive appeals.

In summary, coding of the data was a two-stage process. Using transcripts

of each request episode, a research assistant unaware of the age or group status of the subjects first isolated the actual request forms and assigned politeness values. She then identified and categorized the persuasive appeals. Agreement between the research assistant and the investigator on the assignment of politeness scores and the categorization of appeal types was calculated on 14 randomly selected transcripts (22% of the data) and was found to be 99% and 90%, respectively.

Results

Dependent measures for the analyses of the politeness of the children's requests were (1) politeness scores (ranging from 0.00 to 4.16) and (2) number of different request forms produced (ranging from 1 through 4). Following Clark and Delia (1976), dependent variables for the analyses of persuasive appeals were: (1) highest-level appeal type used (Range: 0-3); (2) total number of appeals produced; and (3) number of different appeal types used (Range: 0-5). In addition, the proportion of appeals which were coded as listener-specific was also examined.

For the variables for which accommodation to listener features was relevant, i.e., all except the number of different request forms produced, analyses of variance were performed using a 2(sex) by 3(grade) by 2(group) by 4(listener) design, with repeated measures on the listener factor. There were no significant grade X listener nor grade X group X listener interactions on any variable. The effects of listener intimacy and listener power on learning disabled and nondisabled children's performance within each sex were investigated with planned contrasts. Following Piche et al., the contrast between listeners of high and low power was determined as $C_{power} = \frac{\bar{X}_{father} + \bar{X}_{priest}}{2} - \frac{\bar{X}_{friend} + \bar{X}_{new\ kid}}{2}$.

Similarly, high-intimate vs. low-intimate listeners were compared by calculating $C_{intimacy} = \frac{\bar{X}_{father} + \bar{X}_{friend}}{2} - \frac{\bar{X}_{priest} + \bar{X}_{new\ kid}}{2}$. Table 2 presents the cell means for the relevant dependent variables as a function

Insert Table 2 about here

of group, sex and listener. Planned power and intimacy contrast values are displayed in Table 3.

Insert Table 3 about here

Politeness

The analysis of variance of the politeness scores revealed a significant sex X group interaction, $F(1,51) = 4.92$, $p < .04$. Duncan's Multiple Range Tests ($p = .05$) indicated that although learning disabled and nondisabled boys did not differ ($\bar{X} = 1.93$ vs. $\bar{X} = 2.08$, respectively, learning disabled girls produced more polite requests ($\bar{X} = 2.47$) than nondisabled girls ($\bar{X} = 1.99$).

Planned contrasts using t-tests (two-tailed) revealed that both power, $t(1,248) = -1.97$, $p < .05$, and intimacy, $t(1,248) = -2.24$, $p < .05$, significantly influenced children's politeness; low-intimate listeners and low-power listeners elicited more polite requests. As shown in Table 2, these effects reflect the finding that all children addressed their least polite requests to their fathers, a high-intimate and high-power figure. Within-sex comparisons indicated that neither relative power nor intimacy of listener had a significant effect on the politeness of the learning disabled and nondisabled girls' requests. However, both the intimacy and power variables discriminated nondisabled from learning disabled boys. Although the intimacy dimension had no effect on the politeness of learning disabled boys' requests, nondisabled boys were significantly more polite to low-intimate listeners than to high-

intimate listeners, $t(1,248) = -2.84$, $p < .01$. Conversely, requests produced by learning disabled boys differentiated between high- and low-power listeners, $t(1,248) = -2.75$, $p < .01$, whereas those of nondisabled boys did not. Surprisingly, however, high-power listeners elicited significantly less polite requests from the learning disabled boys than did low-power listeners. The contrast between learning disabled and nondisabled boys on their accommodation to the power variable was also significant, $t(1,244) = 2.43$, $p < .02$.

The analysis of variance of the number of different request forms indicated no significant main effects or interactions. The children produced an average of 2.3 different request forms (S.D. = 0.75) across the 4 listener conditions.

Persuasive Appeals

Level of perspective-taking. The analysis of variance of the highest-level appeal type produced indicated a main effect for grade, $F(2,51) = 11.51$, $p < .0001$, demonstrating that the production of appeals which reflected more sophisticated perspective-taking increased with age. Duncan tests ($p = .05$) revealed that second-grade children produced fewer higher-order appeal types ($\bar{X} = 1.05$) than fourth grade ($\bar{X} = 1.99$) or sixth grade ($\bar{X} = 1.81$) children.

Further, a significant group effect, $F(1,51) = 4.45$, $p < .04$, and a sex X group interaction $F(1,51) = 11.14$, $p < .002$, were found. Nondisabled boys were more likely to offer higher-order appeals ($\bar{X} = 2.07$) than learning disabled boys ($\bar{X} = 1.37$); however, no difference was found in the performance of learning disabled and nondisabled girls ($\bar{X} = 1.75$ vs. $\bar{X} = 1.61$, respectively).

Again, the effects of listener variables were significant only for boys, and the variations in appeal levels of the learning disabled and nondisabled boys did not reflect the same dimensions. Learning disabled boys produced more high-order appeals to low-intimate listeners than to intimate listeners,

$t(1,248) = -1.98$, $p < .05$, whereas nondisabled boys were more likely to address their more sophisticated appeals to peers, i.e., low-power listeners, than to adults, $t(1,248) = -2.59$, $p < .01$.

Total number of appeals. A developmental increase in the total number of appeals produced was reflected in a significant main effect for grade, $F(2,51) = 6.61$, $p < .003$. Again, the increase occurred between second grade ($\bar{X} = 1.41$) and the two higher grades ($\bar{X} = 2.31$ and $\bar{X} = 1.93$, respectively).

The analysis of variance also indicated a marginal sex X group interaction, $F(1,51) = 3.94$, $p < .053$. Learning disabled girls produced somewhat more appeals than did nondisabled girls ($\bar{X} = 2.20$ vs. $\bar{X} = 1.96$), while learning disabled boys produced fewer appeals than nondisabled boys ($\bar{X} = 1.69$ vs. $\bar{X} = 2.02$). The total number of appeals produced by all children was not influenced by the intimacy or power variables.

Number of different appeal types. A similar pattern of results was evident for the number of different appeal types produced. A significant main effect for grade, $F(2,51) = 7.28$, $p < .002$, reflected the finding that fourth grade ($\bar{X} = 1.68$) and sixth grade ($\bar{X} = 1.45$) children produced a wider variety of appeal types than did second grade children ($\bar{X} = 1.09$).

The significant interaction of sex X group, $F(1,51) = 4.81$, $p < .04$, indicated that learning disabled boys produced fewer different appeal types ($\bar{X} = 1.26$) than did nondisabled boys ($\bar{X} = 1.60$), although learning disabled and nondisabled girls did not differ ($\bar{X} = 1.51$ vs. $\bar{X} = 1.46$, respectively).

The diversity of appeals offered by the learning disabled and nondisabled girls was not related to the listener variables of power and intimacy. Again, the intimacy dimension was salient only for learning disabled boys, $t(1,248) = -2.45$, $p < .02$, whereas normal boys were influenced by the power factor,

$t(1,248) = -1.98$, $p < .05$. The widest variety of appeal types was addressed to low-intimate listeners by learning disabled boys and to low-power listeners by nondisabled boys. The contrast between learning disabled and nondisabled boys in the degree of accommodation to the intimacy variable was also significant, $t(1,248) = 2.25$, $p < .05$.

Specific appeals. The proportion of appeals which were listener-specific was entered into an analysis of variance which indicated only a significant sex X group interaction, $F(1,51) = 4.47$, $p < .004$. Learning disabled and nondisabled girls did not differ in the proportion of specific appeals produced ($\bar{X} = 7.36\%$ vs. $\bar{X} = 3.85\%$, respectively); learning disabled boys produced a smaller proportion of specific appeals than did nondisabled boys ($\bar{X} = 8.79\%$ vs. $\bar{X} = 19.24\%$, respectively).

A significant contrast between high- and low-power listeners revealed that more specific appeals were addressed to high-power than to low-power listeners, $t(1,248) = 2.04$, $p < .05$. Within-sex and within-group comparisons indicated that the production of specific appeals was significantly influenced by listener variables only for normal boys. As shown in Table 2, the results that nondisabled boys produced more specific appeals to both high-power ($t(1,248) = 2.79$, $p < .01$) and low-intimate ($t(1,248) = -1.97$, $p < .05$) are due to the finding that priests were more likely than other listeners to elicit listener-specific appeals.

Discussion

The results of this study replicate and extend previous studies of children's requesting strategies in several ways. First, these data corroborate other findings that children systematically vary the politeness of their requests according to the social status and familiarity of their listeners, and

that this pragmatic skill is acquired by school age (Ervin-Tripp, 1977; James, 1978; Mitchell-Kernan and Kernan, 1978). Second, the age-related increases found in the number and variety of persuasive appeals produced and the use of appeals reflecting higher levels of listener perspective-taking replicate the developmental differences found by Clark and Delia (1976), i.e., that children's performance exhibits significant increments between second and fourth grades, and then remains fairly constant through the middle school years. In addition, Clark and Delia were able to justify their system for ranking persuasive appeal types along a continuum of listener perspective-taking by showing that their hierarchy was also a developmental progression. The current study provides further support for the validity of this hierarchy by demonstrating that, at least for boys, the generation of higher-order appeal types was influenced by listener variables in reasonable ways.

The predictions concerning learning disabled children's politeness strategies were not confirmed. Learning disabled children did not differ from normally achieving peers in the number of different request forms produced, indicating that, for this task at least, the learning disabled children had an adequate repertoire of syntactic-semantic forms for representing different degrees of politeness. In fact, since the more polite request forms displayed in Table 1 also tend to be longer and more complex, the finding that learning disabled girls produced more polite requests than nondisabled girls may indicate that the learning disabled girls were producing utterances requiring more syntactic- semantic ability.

That learning disabled boys also had sufficient linguistic ability to manipulate the politeness of request forms is demonstrated by the finding that their politeness differentiated high-power from low-power listeners. The

inappropriate nature of this differentiation, i.e., that low-power listeners elicited more polite requests than did high-power listeners, clearly implicates deficits in the understanding of social relationships rather than linguistic impairments. Similarly, the finding that nondisabled boys' requests attended to the intimacy dimension whereas those of learning disabled boys reflected the power variable suggests that learning disabled boys differ from normally achieving boys in the perception of the relative importance of social features to situationally appropriate speech.

The results of the politeness analyses parallel the findings on the variables which are more closely associated with social-cognitive skills, i.e., the number, range and perspective-taking level of persuasive appeals. Compared to nondisabled boys, learning disabled boys produced somewhat fewer and a smaller variety of persuasive appeals, and were less likely to produce appeals representing sophisticated levels of listener perspective-taking. In addition, learning disabled boys produced fewer appeals which were specifically tailored to their listeners' characteristics.

In spite of the consistency of the findings that learning disabled boys had a deficient repertoire of persuasive appeals, they <u>were</u> capable of varying these strategies as a function of listener features. Non-intimate listeners elicited more diverse and more sophisticated appeal types from learning disabled boys than did intimate listeners. Nondisabled boys adapted their persuasive appeals to listener characteristics using a different strategy, i.e., they were more likely to address higher-order and a greater range of persuasive appeals to low-power than to high-power listeners. This trend presumably reflects the notion that the generation of higher-order appeals as well as a variety of appeals is facilitated when addressing a listener who is a peer and, thus,

whose perspective is less difficult to assume than that of an adult.

It appears, then, that learning disabled boys are less likely to use the full potential of their persuasive skills when interacting with familiar individuals, which may contribute to their social rejection by classmates, parents and teachers. In addition, an examination of Table 2 indicates that learning disabled boys are most discrepant from nondisabled boys when addressing their best friends. Across the four listener conditions, learning disabled boys addressed their most polite requests and their least sophisticated and smallest range of appeals to "intimate" peers. The increasing evidence that learning disabled children are unpopular with peers suggests that they may lack the social experience provided by intense interaction with close friends which enhances social-cognitive skills and, presumably, pragmatic development. The excessively polite requests produced by both learning disabled boys and girls suggest that these children are deficient in at least one aspect of pragmatic competence which has been shown to be related to peer interaction, i.e., the ability to be "rude" when necessary (Brenneis and Lein, 1977; Labov, 1972; Mitchell-Kernan and Kernan, 1977).

In summary, learning disabled boys <u>were</u> able to vary the politeness of their requests and the elaboration of persuasive appeals as a function of listener features, albeit less appropriately than nondisabled boys. This suggests that these children (1) had an adequate linguistic repertoire, and (2) were able to perceive the distinctive features of listeners, but (3) differed from control boys in their understanding of the <u>implications</u> of these differences to socially appropriate speech. Learning disabled girls differed from nondisabled girls only in that they produced more polite requests and somewhat more persuasive appeals across all listener conditions. It appears then that these learning

disabled girls generally adopt a more deferential role than control girls.

Studies of the development of pragmatic competence in normal children assume a symbiotic relationship between the acquisition of social-cognitive skills and linguistic structure. The weak version of this hypothesis holds that, although language and social knowledge develop separately, they interact in various domains and at various stages of development. The strong position suggests that "both the strategies for acquiring syntactic knowledge, and the child's development of semantic categories, depend upon an awareness of social relationships, and these strategies continue to structure social reality for the child" (Cook-Gumperz, 1977, p. 103; Bruner, 1975; Lewis and Cherry, 1977; Nelson, 1973). The results of this study support the weak form of the hypothesis, in that a group of learning disabled children with an adequate linguistic repertoire still produced less appropriate requesting strategies than did nondisabled children. In addition, these data reflect the children's deficits in social knowledge and social experience in remarkably consistent ways. However, in light of the pervasive social deficits of these children, it seems reasonable that researchers interested in language intervention should consider the strong version of the hypothesis as one source of language delay. If these children are experiencing less than satisfying social relationships in early childhood, this could contribute to their difficulty in acquiring the linguistic code. In either case, however, these data suggest that effective language intervention must include an assessment and consideration of language-impaired children's social relationships.

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References

Alvy, K. The development of listener-adapted communications in grade-school children from different social-class backgrounds. Genetic Psychology Monographs, 1973, 87, 33-104.

Bachara, G.H. Empathy in learning disabled children. Perceptual and Motor Skills, 1976, 43, 541-542.

Bates, E. Language and context: The acquisition of pragmatics. New York: Academic Press, 1976.

Bedrosian, J., and Prutting, C. Communicative performance of mentally retarded adults in four conversational settings. Journal of Speech and Hearing Research, 1978, 21, 79-95.

Blank, M., Gessner, M. and Esposito, A. Language without communication: A case study. Journal of Child Language, 1979, 6, 329-352.

Bloom, L., and Lahey, M. Language development and language disorders. New York: Wiley, 1978.

Brenneis, D., and Lein, L. "You fruithead": A sociolinguistic approach to children's dispute settlement. In S. Ervin-Tripp and C. Mitchell-Kernan, (Eds.), Child discourse. New York: Academic Press, 1977. Pp. 49-65.

Bruininks, V.L. Actual and perceived peer status of learning disabled students in mainstream programs. Journal of Special Education, 1978, 12, 51-58.

Bruner, J. The ontogenesis of speech acts. Journal of Child Language, 1975, 2, 1-19.

Bryan, T.H. Children's comprehension of nonverbal communication. Journal of Learning Disabilities, 1977, 10, 501-506.

Bryan, T. Peer popularity of learning disabled children. Journal of Learning Disabilities, 1974, 7, 621-625.

Bryan, T. Peer popularity of learning disabled children: A replication. Journal of Learning Disabilities, 1976, 9, 307-311.

Bryan, T., and Bryan, J. Social interactions of learning disabled children. Learning Disability Quarterly, 1978, 1, 33-38.

Bryan, T., and Pflaum, S. Linguistic, cognitive and social analyses of learning disabled children's social interactions. Learning Disability Quarterly, 1978, 1, 70-79.

Bryan, T., Donahue, M., and Pearl, R. Learning disabled children's peer interactions during a small-group problem-solving task. Learning Disability Quarterly, in press.

Bryan, T., Wheeler, R., Felcan, J., and Henek, T. "Come on dummy": An observational study of children's communications. Journal of Learning Disabilities, 1976, 9, 661-669.

Clark, R., and Delia, J. The development of functional persuasive skills in childhood and early adolescence. Child Development, 1976, 47, 1008-1014.

Cook-Gumperz, J. Situated instructions: Language socialization of school-age children. In S. Ervin-Tripp and C. Mitchell-Kernan (Eds.), Child discourse. New York: Academic Press, 1977. Pp. 103-121.

Denckla, M., and Rudel, R. Naming of object drawings by dyslexic and other learning disabled children. Brain and Language, 1976, 3, 1-16.

Dore, J. Children's illocutionary acts. In R. Freedle (Ed.), Discourse: Comprehension and production. Norwood, New Jersey: Ablex Publishing Corporation, 1977.

Dore, J., Gearheart, M., and Newman, D. The structure of nursery school conversations. In K. Nelson (Ed.), Children's language, Vol. 1. New York: Gardner Press, 1978, 337-395.

Dunn, L.M. Peabody picture vocabulary test. Circle Pines, Minnesota: American Guidance Service, 1965.

Edwards, A. Techniques of attitude scale construction. New York: Appleton-Century-Croft, 1957.

Ervin-Tripp, S. Is Sybil there? The structure of some American English directives. Language in Society, 1976, 5, 25-66.

Ervin-Tripp, S. Wait for me, roller-skate. In S. Ervin-Tripp and C. Mitchell-Kernan (Eds.), Child discourse. New York: Academic Press, 1977. Pp. 165-188.

Fry, M.A.,Johnson, C.S., and Muehl, S. Oral language production in relation to reading achievement among select second graders. In D.J. Bakker and P. Satz (Eds.), Specific reading disability, Netherlands: Rotterdam University Press, 1970, 123-159.

Fey, M., Leonard, L., Fey, S., and O'Connor, C. The intent to communicate in language-impaired children. Paper presented at the Boston University Conference on Language Development, September, 1978.

Fey, M., Leonard, L., and Wilcox, K. Speech style modifications of language disordered children. Journal of Speech and Hearing Disorders, in press.

Finley, G., and Humphreys, C. Naive psychology and the development of persuasive appeals in girls. Canadian Journal of Behavioral Science, 1974, 6, 75-80.

Garvey, C. Requests and responses in children's speech. Journal of Child Language, 1975, 2, 41-63.

Gottman, J., Gonso, J., and Rasmussen, B. Social interaction, social competence and friendship in children. Child Development, 1975, 46, 709-718.

Hymes, D. Competence and performance in linguistic theory. In R. Huxley and E. Ingram (Eds.), Language acquisition: Models and methods. New York: Academic Press, 1971, 3-24.

James, S. Effect of listener age and situation on the politeness of children's directives. Journal of Psycholinguistic Research, 1978, 7, 307-317.

Keogh, B., Tchir, C., and Windeguth-Behn, A. Teachers' perceptions of educationally high-risk children. Journal of Learning Disabilities, 1974, 7, 367-374.

Labov, W. Rules for ritual insults. In D. Sudnow (Ed.), Studies in social interaction. New York: The Free Press, 1972, 120-169.

Lewis, M., and Cherry, L. Social behavior and language acquisition. In M. Lewis and L. Rosenblum (Eds.), Interaction, conversation and the acquisition of language. New York: John Wiley, 1977, 227-245.

Mitchell-Kernan, C., and Kernan, K. Pragmatics of directive choice among children. In S. Ervin-Tripp and C. Mitchell-Kernan (Eds.), Child discourse, New York: Academic Press, 1977, 189-208.

Moran, M.R., and Byrne, M.C. Mastery of verb tense markers by normal and learning disabled children. Journal of Speech and Hearing Research, 1977, 20, 529-542.

Naslund, R., Thorpe, L., and Lefever, D. SRA achievement series test. Chicago, Ill.: Science Research Associates, Inc., 1978.

Nelson, K. Structure and strategy in learning to talk. Monograph of the Society for Research in Child Development, 1973, 38 (Serial No. 149).

Ochs, E., and Schieffelin, B. (Eds), Developmental pragmatics. New York: Academic Press, 1979.

Owen, R., Adams, P., Forrest, T., Stolz, L., and Fisher, S. Learning disorders in children: Sibling studies. Monographs of the Society for Research in Child Development, 1971, 36 (Serial No. 144).

Piche, G., Rubin, D., and Michlin, M. Age and social class in children's use of persuasive communicative appeals. Child Development, 1978, 49, 773-780.

Prinz, P. Requesting in normal and language disordered children. In K. Nelson (Ed.), Children's language, Vol. 3. New York: Gardner Press, in press.

Rees, N. Pragmatics of language: Applications to normal and disordered language development. In R. Schiefelbusch (Ed.), Bases of language intervention. Baltimore: University Park Press, 1978.

Rubin, K.H. Relationship between egocentric communication and popularity among peers. Developmental Psychology, 1972, 7, 364.

Scranton, T., and Ryckman D. Sociometric status of learning disabled children in an integrative program. Journal of Learning Disabilities, 1979, 12, 402-407.

Shantz, C. The generality and correlates of egocentrism in childhood. Paper presented at the Society for Research in Child Development, 1975.

Siperstein, G.N., Bopp, M.J.& Bak, J.J. Social status of learning disabled children. Journal of Learning Disabilities, 1978, 10, 98-102.

Snyder, L. Communicative and cognitive abilities and disabilities in the sensorimotor period. Merrill-Palmer Quarterly, 1978, 24, 161-180.

Spivack, G., and Shure, M. Social adjustment of young children. San Francisco: Jossey-Bass, Inc., 1974.

Torgesen, J. Problems and prospects in the study of learning disabilities. In E.M. Hetherington (Ed.), Review of child development research, Vol. 5. Chicago: University of Chicago Press, 1975.

U.S. Office of Education. Assistance to states for education of handicapped children: Procedures for evaluating specific learning disabilities. Federal Register, 1977, 42, 65082-65085.

Vellutino, F.R. Dyslexia: Theory and research. Cambridge: M.I.T. Press, 1979.

Vogel, S. Syntactic abilities in normal and dyslexic children. Baltimore: University Park Press, 1975.

Wiig, E.H., and Harris, S.P. Perception and interpretation of nonverbally expressed emotions by adolescents with learning disabilities. Perceptual and Motor Skills, 1974, 38, 239-245.

Wiig, E.H., and Semel, E.M. Language disabilities in children and adolescents. Columbus, Ohio: Charles E. Merrill Publishing Co., 1976.

Wolf, M. The word retrieval process and reading in children and aphasics. In K. Nelson (Ed.), Children's language, Vol. 3. New York: Gardner Press, in press.

Wood, R., Weinstein, E., and Parker, T. Children's interpersonal tactics. Sociological Inquiry, 1967, 37, 129-138.

Woodcock, R., and Johnson, M. Woodcock-Johnson psycho-educational battery. Boston, Mass.: Teaching Resources Corp., 1977.

Table 1. Request forms, examples and scale values

REQUEST FORM	EXAMPLES	SCALE VALUE
Imperative	Give me your newspaper.	0.00
Do you want to + verb	Do you want to give me your newspaper?	0.58
Can you + verb	Can you give me your newspaper?	0.98
Will you + verb	Will you give me your newspaper?	1.19
Would you + verb	Would you give me your newspaper?	1.55
Imperative + "please"	Please give me your newspaper.	1.58
Could you + verb	Could you give me your newspaper?	1.70
Can I + verb	Can I have your newspaper?	1.80
Do you think I/you could + verb	Do you think you could give me your newspaper?	2.10
Could I + verb	Could I have your newspaper?	2.22
Will you please + verb	Will you please give me your newspaper?	2.30
Can you please + verb	Can you please give me your newspaper?	2.69
Could you please + verb	Could you please give me your newspaper?	2.70
Would you please + verb	Would you please give me your newspaper?	2.80
Can I please + verb	Can I please have your newspaper?	3.13
May I + verb	May I have your newspaper?	3.51
Could I please + verb	Could I please have your newspaper?	3.58
May I please + verb	May I please have your newspaper?	4.16

	BOYS				GIRLS			
	Father	Best Friend	New Kid	Priest	Father	Best Friend	New Kid	Priest
				Politeness (0.00-4.16)				
LD	1.44	2.23	2.12	1.93	2.25	2.83	2.30	2.51
NLD	1.73	1.87	2.12	2.52	1.77	2.04	2.06	2.09
				Level of Perspective-Taking (0-3)				
LD	1.26	1.16	1.58	1.47	1.73	1.73	1.71	1.80
NLD	1.77	2.41	2.18	1.94	1.62	1.69	1.61	1.54
				Number of Different Appeal Types (0-5)				
LD	1.33	1.00	1.65	1.33	1.33	1.73	1.54	1.60
NLD	1.59	1.77	1.73	1.41	1.69	1.31	1.39	1.31
				Proportion of Specific Appeals				
LD	5.56%	5.56	8.33	15.74	10.00%	3.33	5.56	10.56
NLD	13.24	14.71	8.82	40.20	0.00	7.69	3.85	3.85

Table 2. Means for politeness and persuasive appeal variables as a function of listener, sex and group.

Table 3

	LISTENER EFFECT	GROUP X LISTENER EFFECTS (BOYS)			GROUP X LISTENER EFFECTS (GIRLS)		
		LD	NLD	NLD-LD	LD	NLD	NLD-LD
				Politeness			
Intimacy	-0.214*	-0.189	-0.522*	-0.166	0.136	-0.174	-0.155
Power	-0.188*	-0.492*	0.132	0.312*	-0.182	-0.119	0.031
				Level of Perspective-Taking			
Intimacy	-0.077	-0.316*	0.03	0.173	-0.024	0.077	0.05
Power	-0.123	-0.18	-0.441*	-0.221	0.043	-0.077	-0.06
				Number of Different Appeal Types			
Intimacy	0.008	-0.323*	0.104	0.214*	-0.036	0.151	0.094
Power	-0.024	0.009	-0.249*	-0.129	-0.169	0.153	0.161
				Proportion of Specific Appeals			
Intimacy	-5.02	-6.481	-10.54*	-2.03	-1.39	2.22	0.69
Power	5.69*	3.704	14.95*	5.62	5.83	-3.84	-4.84

*$p < .05$

TABLE 3. Values of planned power and intimacy contrasts.